WHAT IS CLAIMED IS:

- 1. A cancer cell-specific HLA-F antigen wherein said antigen comprises at least a part of the amino acid sequence described in SEQ ID No. 6 in the Sequence Listing.
- 2. A cancer cell-specific HLA-F antigen wherein said antigen comprises at least a part of the amino acid sequence described in SEQ ID No. 5 in the Sequence Listing.
- 3. The cancer cell-specific HLA-F antigen according to either claim 1 or 2 wherein said antigen is obtained by expressing a DNA as its entirety or a part of it described in either SEQ ID No. 1, 2, or 3 in the Sequence Listing.
- 4. A DNA coding for a cancer cell-specific HLA-F antigen according to either claim 1, 2, or 3.
- 5. A method of preparing the cancer cell-specific HLA-F antigen according to either claim 1, 2, or 3 comprising the steps of:

producing a fusion protein using cells transformed by the DNA containing the entirety or a part of the nucleotide sequence described in either SEQ ID No. 1, 2, or 3 in the

Sequence Listing; and

treating the fusion protein with a protease.

- 6. The method of preparing the cancer cell-specific HLA-F antigen according to claim 5 wherein said protease is Enterokinase.
- 7. The method of preparing the cancer cell-specific HLA-F antigen according to claim 5 wherein said protease is Factor Xa.
- 8. A method of preparing the cancer cell-specific HLA-F antigen according to either claim 1, 2, or 3 wherein said method further comprises a process of purification.
- 9. A diagnostic method of cancer comprising the step of detecting an anti HLA-F antibody of a subject by using a cancer cell-specific HLA-F antigen as its entirety or part of it.
- 10. A diagnostic method of cancer comprising the steps of: competitively reacting a part of immunological pair which can be formed immune complex with a cancer cell-specific HLA-F antigen as its entirety or part of it, and an anti-HLA-F antibody in a body fluid of a subject; and

detecting an anti-HLA-F antibody in the body fluid of the individual.

- 11. The diagnostic method of cancer according to either claim 9 or 10 wherein the body fluid is a blood.
- 12. A detector of cancer comprising an introducer to which body fluid of an individual is introduced and an immunoreactor containing the cancer cell-specific HLA-F antigen as its entirety or part of it.
- 13. A detector kit of cancer comprising the detector according to claim 12 and at least one reagent for detection.